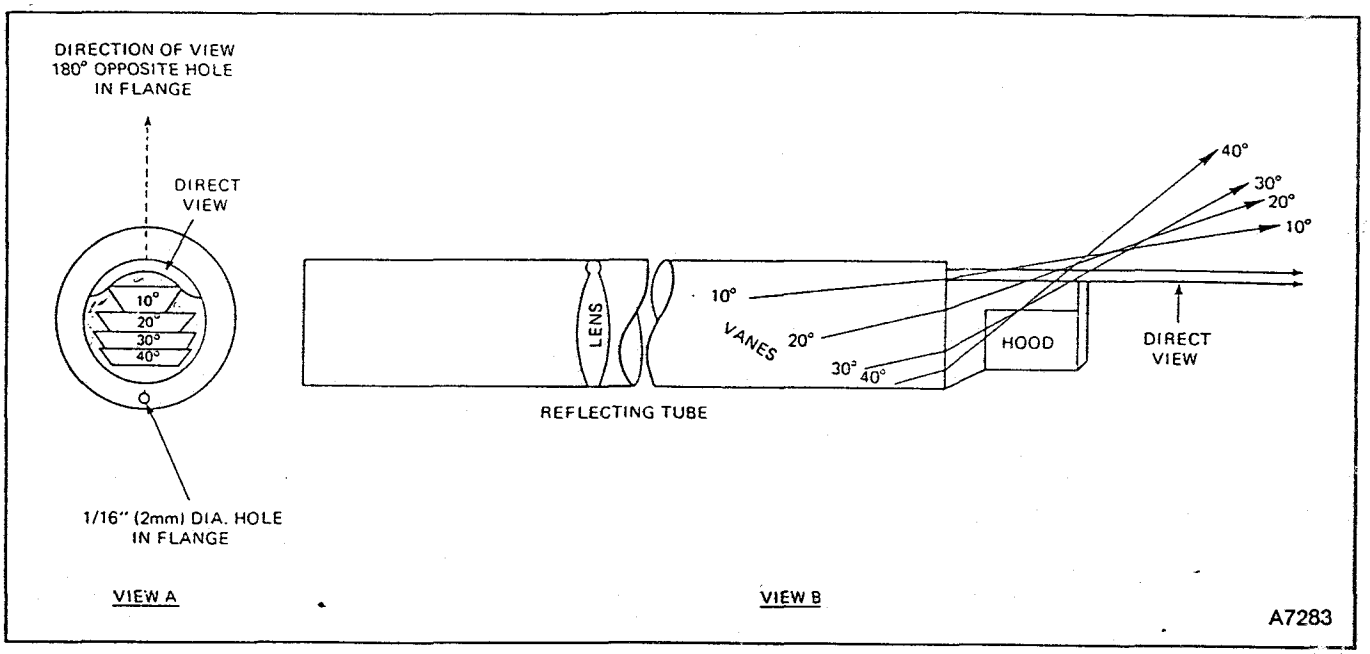

FIGURE 18 — Reflecting Vanes.

4. Loosen the packing gland and slide the isolation pipe well out of the support pipe. Insert the sighting device into the detector housing. The vanes in the reflecting tube will be dark and dull.

5. Slowly slide the detector assembly into the support pipe. As light become visible, rotate the isolation tube so that the first visible vane appears to be oriented toward the coal pipe.

6. Refer to Figure 18, View B. The "picture" of the four reflecting vanes as seen by the sighting device will vary depending on firing conditions in that burner. When firing oil lighters only or oil and coal, probably all four vanes will be bright with flame because the lighter will maintain ignition close to the burner or coal nozzle. When firing coal only, the ignition point will have moved out somewhat and the 10° and possible the 20° vane will be sighted at the coal stream before the ignition point; consequently, they will be dark compared to the 30° and 40° vanes. At full pulverizer load and especially if the burner is fuel rich causing ignition to be further off the burner than usual, it is possible that the 10°, 20°, and 30° vanes will be dark and only the 40° vane will be bright.

7. At this point, slide the detector assembly in an additional two inches to ensure good exposure of all the vanes.

NOTE: Do not insert the detector assembly too far into the furnace. Damage will occur to the reflecting vanes from the excessively high temperatures.

8. Once the detector assembly is properly sighted, tighten the set screws to clamp the isolation tube in place and tighten the gland nut of the packing gland assembly firmly around the isolation tube.

NOTE: Do not overtighten the set screws or the isolation tube may be damaged, preventing removal of the detector lens housing and/or reflecting tube.

9. Remove the sighting device and install the sensor assembly in the detector housing by alternately tightening the three mounting screws until the sensor assembly gasket is firmly seated against the aspirator housing.

10. Refer to "Noise Testing" and "Descrimination Test" and perform the procedures outlined.